| Ref<br># | Hits  | Search Query  | DBs   | Default<br>Operat<br>or | Plura<br>Is | Time Stamp          |
|----------|-------|---|---|-------------------------|-------------|---------------------|
| L1       | 63085 | (castor adj oil) or<br>(ricinoleic near5 acid)  | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19<br>12:36 |
| L2       | 899   | (castor or ricinoleic) near5<br>(estolide or polyester)   | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19<br>12:37 |
| L3       | 9400  | (epoxidi?ed or<br>epoxidat?\$2 or<br>epoxylat?\$2) near5<br>(vegetable or soybean or<br>soya or soyabean) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19 12:38    |
| L4       | 524   | (I1 or I2) near10 I3  | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR<br>·                 | ON          | 2006/01/19<br>12:59 |

| L5 | 58    | (I1 or I2) and I3   | EPO;<br>JPO;<br>DERWEN<br>T;<br>IBM_TD<br>B           | OR | ON | 2006/01/19<br>12:57 |
|----|-------|---------------------|---|----|----|---------------------|
| L6 |       | jp-51118099-\$.did. | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>12:58 |
| L7 | 523   | 14 not 16           | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19          |
| L8 | 36280 | "523"/\$.ccls.      | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19          |

| L9  | 110512 | "525"/\$.ccls.    | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>13:03 |
|-----|--------|-------------------|---|----|----|---------------------|
| L10 | 176    | 17 and (18 or 19) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>13:29 |

| Ref<br># | Hits   | Search Query   | DBs   | Default<br>Operat<br>or | Plura<br>Is | Time Stamp          |
|----------|--------|--|---|-------------------------|-------------|---------------------|
| L1 ·     | 7      | (("4316940") or<br>("2921040")).PN.  | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | OFF         | 2006/01/19<br>16:53 |
| L2       | 283587 | ((epoxidi?ed or epoxidat?\$2 or epoxylat?\$2) near5 (vegetable or soy\$5)) or (epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl\$ or polyglycidyl\$                                     | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19<br>16:55 |
| L3       | 83447  | ricinoleic or castor   | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19<br>16:55 |
| L4       | 290405 | peroxide or butylperoxy or<br>butylperoxyisopropyl or<br>hydroperoxide or<br>monohydroperoxide or<br>cumylhydroperoxide or<br>methylethylketoneperoxid<br>e or dicumylperoxide or<br>dibenzoylperoxide | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR                      | ON          | 2006/01/19<br>16:57 |

| L5 | 3120 | I2 and I3 and I4      | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>16:57 |
|----|------|-----------------------|---|----|----|---------------------|
| L6 | 249  | (I2 near10 I3) and I4 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>16:58 |
| L7 | 140  | 13 near10 l4          | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>16:58 |
| L8 | 19   | I2 and I7             | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>17:04 |

| L9  | 35 | (castor or ricinoleic) near3 estolide | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>17:04 |
|-----|----|---------------------------------------|---|----|----|---------------------|
| L10 | 3  | I2 and I9                             | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B | OR | ON | 2006/01/19<br>17:05 |

```
(FILE 'HOME' ENTERED AT 14:04:02 ON 19 JAN 2006)
     FILE 'CAPLUS' ENTERED AT 14:04:10 ON 19 JAN 2006
L1
              1 S JP05132616/PN
     FILE 'REGISTRY' ENTERED AT 14:04:47 ON 19 JAN 2006
            60 S EPOXID? (3A) SOY?
L2
L3
            215 S RICINOLEIC (W) ACID
              0 S (RICINOLEIC(W)ACID) AND ESTOLIDE
L4
              O S (RICINOLEIC(W) ACID) AND POLYESTER
L5
            215 S RICINOLEIC (W) ACID
L6
              0 S 200-209
L7
           1383 S CASTOR (W) OIL
L8
     FILE 'CAPLUS' ENTERED AT 14:10:04 ON 19 JAN 2006
L<sub>9</sub>
              0 S 8001-79-4#/RN
L10
              0 S 8013-07-8#/RN
L11
           5184 S (EPOX!DI!ED OR EPOXIDAT!## OR EPOXYLAT!##) (5A) (SOYA OR SOY OR
                S EP/PCT
     FILE 'REGISTRY' ENTERED AT 14:11:40 ON 19 JAN 2006
          48021 S EP/PCT
L12
     FILE 'CAPLUS' ENTERED AT 14:11:40 ON 19 JAN 2006
L13
          73550 S L12
         177457 S (EPOX!###(W)RESIN#) OR DIEPOX!### OR POLYEPOX!### OR DIGLYCID
L14
L15
         187227 S L10 OR L13 OR L14
L16
          29475 S CASTOR (5A) OIL#
L17
           1998 S 141-22-0#/RN
           1275 S L15 AND (L16 OR L17)
L18
     FILE 'CAPLUS' ENTERED AT 14:13:41 ON 19 JAN 2006
     FILE 'REGISTRY' ENTERED AT 14:13:44 ON 19 JAN 2006
           2647 S SEBACIC(W) ACID
L19
     FILE 'CAPLUS' ENTERED AT 14:14:32 ON 19 JAN 2006
L20
          62463 S (POLYCARBOXYLIC OR DICARBOXYLIC) (W) ACID#
L21
          65581 S L20 OR (111-20-6#/RN)
         123422 S CROSSLINKER# OR (CROSS(W) (LINKER#)) OR ((CURING OR HARDENING
L22
=> s 121 or 122
L23
    186383 L21 OR L22
=> s l18 and l23
         339 L18 AND L23
=> s l15(7a)(l16 or l17)
           506 L15(7A)(L16 OR L17)
L25
=> s 125 and 123
        142 L25 AND L23
```

L26

```
141-22-0 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     9-Octadecenoic acid, 12-hydroxy-, (9Z,12R)- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
CN
     9-Octadecenoic acid, 12-hydroxy-, [R-(Z)]-
     Ricinoleic acid (8CI)
CN
OTHER NAMES:
     (R)-12-Hydroxyoleic acid
CN
     12-D-Hydroxy-9-cis-octadecenoic acid
CN
CN
     12-Hydroxy-cis-9-octadecenoic acid
     12-Hydroxyoctadeca-9-enoic acid
CN
CN
     Edenor Ri 90
     Nouracid CS 80
CN
     NSC 281242
CN
     Ricinic acid
CN
CN
     Ricinolic acid
FS
     STEREOSEARCH
     8040-35-5, 25607-48-1, 17026-54-9, 45260-83-1
DR
MF
     C18 H34 O3
CI
     COM
LC
     STN Files:
                   ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
       BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA,
       PROMT, PS, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
          (*File contains numerically searchable property data)
     Other Sources:
                       DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

$$_{\text{HO}_2\text{C}}$$
  $_{\text{CH}_2)_{7}}$   $_{\text{C}}$   $_{\text{OH}}$   $_{\text{OH}}$   $_{\text{OH}}$   $_{\text{C}}$ 

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1996 REFERENCES IN FILE CA (1907 TO DATE)
405 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1998 REFERENCES IN FILE CAPLUS (1907 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
8001-79-4 REGISTRY *
RN
* Use of this CAS Registry Number alone as a search term in other STN files may
 result in incomplete search results. For additional information, enter HELP
 RN* at an online arrow prompt (=>).
    Entered STN: 16 Nov 1984
ED
    Castor oil (CA INDEX NAME)
CN
OTHER NAMES:
    3 Castor Oil
CN
    Aromatic castor oil
CN
    Castor oil 3
CN
CN
    Crystal O
    DB Oil
CN
CN
    ELA-DR
CN
    Fats and Glyceridic oils, castor
    Fats and Glyceridic oils, ricin
CN
    LAVCO
CN
CN
    Neoloid
    No. 3 Castor oil
CN
    Oil of Palma Christi
CN
    Oils, glyceridic, ricin
CN
CN
     Phorbyol
CN
    Ricinol
    Ricinus communis oil
CN
CN
    Tangantangan oil
    Thixcin ST
CN
CN
    Viscotrol C
CN
    z 1
CN
     Z 1 (oil)
    Extractives and their physically modified derivatives. It consists
DEF
     primarily of the glycerides of the fatty acid ricinoleic. (Ricinus
     communis).
     8013-56-7, 8015-57-4, 8021-37-2, 8036-08-6, 8041-22-3, 8041-95-0,
DR
     89958-32-7
MF
    Unspecified
    COM, MAN, CTS
CI
    STN Files: ADISNEWS, AGRICOLA, BIOSIS, BIOTECHNO, CASREACT, CHEMCATS,
LC
       CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE,
       ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IPA, MEDLINE,
       MSDS-OHS, NIOSHTIC, PDLCOM*, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT,
       USAN, USPAT2, USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
     Other Sources:
                     DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

```
8013-07-8 REGISTRY *
* Use of this CAS Registry Number alone as a search term in other STN files may
  result in incomplete search results. For additional information, enter HELP
  RN* at an online arrow prompt (=>).
ED
     Entered STN: 16 Nov 1984
     Soybean oil, epoxidized (CA INDEX NAME)
CN
OTHER NAMES:
     Adekacizer 0 130L
CN
     Adekacizer O 130P
CN
CN
     Adekacizer O 130PA
     Adekacizer 0 130S
CN
CN
     ADK Cizer O 130L
     ADK Cizer O 130P
CN
     ADK Cizer O 130PA
CN
     ADK Cizer O 130S
CN
CN
     ADK Cizer O 13P
     Admex 711
CN
     ATO Vikoflex 7170
CN
     Baerostab LSA
CN
     D 130P
CN
CN
     Daimac S 300
     Daimac S 300K
CN
     Drapex 6.8
CN
CN
     Drapex 68
CN
     E 2000
     Ecepox PB 1
CN
CN
     Edenol D 16
     Edenol D 20
CN
     Edenol D 81
CN
     Edenol D 82
CN
     Epocizer P 206
CN
CN
     Epocizer W 1000
CN
     Epocizer W 100EL
CN
     Epocizer W 100S
CN
     Epoxidized soya oil
CN
     Epoxidized soybean oil
CN
     Epoxol 7-4
CN
     Ergoplast ES
CN
     ESBO
CN
     Estabex 2307
     Flexol EPO
CN
    . G 62
CN
CN
     Interstab Plastoflex 2307
CN
     Kapox S 6
CN
     Kronox S
     Lankroflex E 2307
CN
CN
     Lankroflex GE
CN
     Merginat ESB
CN
     New-Cizer 510R
CN
     Newkalgen 800
CN.
     NF 3000
CN
     NK 800
CN
     O 130P
CN
     Paraplex G 60
CN
     Paraplex G 61
CN
     Paraplex G 62
CN
     Pennac TM
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
     12768-71-7, 9036-74-2, 11114-05-9, 121853-93-8, 53569-11-2, 55070-15-0,
DR
     56090-94-9, 51059-88-2, 61788-96-3, 37260-65-4, 37307-47-4, 37311-19-6, 39378-88-6, 39390-63-1, 52440-01-4, 193425-83-1
MF
     Unspecified
CI
     MAN, CTS
```

```
111-20-6 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     Decanedioic acid (9CI)
                            (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Sebacic acid (8CI)
OTHER NAMES:
CN
     1,10-Decanedioic acid
     1,8-Octanedicarboxylic acid
CN
CN
    n-Decanedioic acid
CN
    NSC 19492
    NSC 97405
CN
FS
     3D CONCORD
     C10 H18 O4
MF
CI
     COM
LC
                 AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
     STN Files:
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,
       DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
       ENCOMPPAT, ENCOMPPAT2, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
       MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PHAR, PIRA, PROMT,
       RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2; USPATFULL, VTB
         (*File contains numerically searchable property data)
                     DSL**, EINECS**, TSCA**
    Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

 $HO_2C-(CH_2)_8-CO_2H$ 

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4875 REFERENCES IN FILE CA (1907 TO DATE)
997 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4878 REFERENCES IN FILE CAPLUS (1907 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)